UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,589	02/18/2004	Ronald Baruzzi	2003-0119	4749

26652 7590 02/25/2009

AT&T CORP.
ROOM 2A207
ONE AT&T WAY
BEDMINSTER, NJ 07921

EXAMINER	
PATEL, HEMANT SHANTILAL	
ART UNIT	PAPER NUMBER
2614	
MAIL DATE	DELIVERY MODE
02/25/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/782,589	BARUZZI ET AL.	
	Examiner	Art Unit	
	HEMANT PATEL	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 26, 2009 has been entered. Claims 1-12 are pending in this application.

Response to Amendment

2. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smyk (US Patent No. 6,603,760 B1), and further in view of Wilson (US Patent No. 5,555,288).

Regarding claim 1, Smyk teaches of a method of processing calls in an aggregate telecommunications network having at least two subnetworks, comprising the steps of:

creating a set of decision criteria, applied in a first (Fig. 4 item 402) of said at least two subnetworks, that determine which calls entering said first of said at least two sub networks should receive service processing in said second (Fig. 4 item 400) of said at least two subnetworks;

for calls that are to receive service processing in a second subnetwork, guiding those calls to that subnetwork (col. 5 ll. 12-21, 28-57; col. 6 ll. 3-47; guiding calls to PSTN);

invoking service processing by said second of said at least two subnetworks (col. 6 ll. 48-57) (col. 4 ll. 64-col. 9 ll. 50).

Smyk teaches of guiding calls and providing service based on information for a line from which call comes in (col. 5 ll. 46-61), but Smyk does not teach of providing service based on the type of a trunk from which the call comes in.

Grouping trunks of same type in a common set as a trunk group was very well know in the art, and the trunk group of the trunk identified various parameters including trunk type associated with the trunk for common processing of calls from the multiple trunks sharing the same characteristics. (Note: the **trunk type** determination as disclosed in the instant application paragraph 0031 **is dependent upon** the attributes of the incoming switch **trunk group**. Note: The Applicant's attention is drawn to US Patent No. 3,564,149 to Charles Funk et. al. col. 23 ll. 21-25 wherein it teaches that trunk group information provides the trunk type and origination of the call, US Patent No. 6,459,788 to Khuc et. al. col. 28 ll. 7-20 wherein it teaches that trunk group identifies the trunk type, and also Newton's Telecom Dictionary by Harry Newton, 16th edition, February 2000, ISBN # 1-57820-053-9, published by Telecom Books, pg 884 describes that trunk group is a group of essentially like trunks that go between the same geographical points, and trunk group performs the same function as a single trunk. The copy of this dictionary page is supplied with this Office Action).

However, in the same field of communication, Wilson teaches of grouping multiple trunks of the same type in a trunk group by inheriting common characteristics (col. 6 ll. 30-col. 7 ll. 44, col. 17 ll. 38-48, ll. 55-62 show multiple trunk groups with their respective individual trunks with the same type of T1-E&M), and to couple trunks in a particular trunk group to their specialized module for processing (col. 18 ll. 1-8), and also update characteristics of all trunks in a trunk group by changing parameter at the trunk group level (col. 18 ll. 10-col. 19 ll. 10 changing the trunk type for all trunks in trunk

group 01 from T1-E&M to T1-E&M-Wink with single change command) (col. 2 ll. 38-43 operating parameters of trunk group are defined as trunk type configuration).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Smyk to group links with common characteristics as a trunk group and provide specialized processing based on trunk group defined trunk type as taught by Wilson in order to "provide mechanism which allows rapid and simple reconfiguration of a voice processing system in order to enable the system to operate with a plurality of different telephone lines and switching equipment" (Wilson, col. 2 ll. 15-18).

Regarding claim 2, Smyk teaches of the method further comprising the step of:

providing information conveyed by signaling that accompanies the call guided from the first subnetwork to the second subnetwork that is sufficient for causing the invocation of service processing in the second subnetwork (col. 6 ll. 11-47 SM sending set-up message to class 5 switch; col. 6 ll. 34-47 SM causing signaling of ABCD bits for connection necessary for invocation of service).

Regarding claim 3, Smyk teaches of the method further comprising the step of:

providing information conveyed by signaling that accompanies the call guided from the first to second subnetwork that is sufficient for supporting service processing in the second subnetwork (col. 6 ll. 11-47 SM sending set-up message to class 5 switch and SM causing signaling of ABCD bits for connection sufficient for supporting of service; col. 6 ll. 48-57 dialed digits sufficient for service are conveyed via signaling).

Regarding claim 4, Smyk teaches of the method wherein said information conveyed by signaling comprises:

information selected from the group of routing number, *original dialed number,* an explicit trigger ***or*** a combination thereof (col. 6 ll. 11-13, 48-57, information in set-up message and dialed digits i.e. original dialed number).

Regarding claim 5, Smyk teaches of the method wherein said associated information conveyed by signaling is selected from the group of information available to the first subnetwork *calling party number (col. 5 ll. 46-53 subscription of customer based on calling party number), original dialed number (col. 6 ll. 48-57 telephony or AIN services based on collected digits i.e. original dialed number),* routing number, charge number, Originating Line Information, Customer ID, ***or*** a combination thereof.

Regarding claim 6, Smyk teaches of the method further comprising the step of:

targeting a specific element ***or*** type of element within said second subnetwork of said at least two sub networks to invoke service processing for the call (col. 6 ll. 11-13 specific class 5 switch; col. 8 ll. 46-47 PSTN type of network element).

Regarding claim 7, Smyk teaches of the method where the selection of the specific element ***or*** type of element within said second subnetwork may be based on the location of the origination of the call into the first said subnetwork (col. 5 ll. 1-7 local service provider for a subscriber is based on subscriber line location originating the call).

Regarding claim 8, Smyk teaches of the method wherein said decision criteria is selected from at least ***one of*** the group of:

service type, *features potentially applicable within a given service type (col.5 ll. 46-53 service subscription),* called party number, original dialed number, how close the ingress switch in said first subnetwork is in terms of some proximity measure to said second subnetwork, the identity or type of the particular trunk group over which the call entered said first of said at least two subnetworks, *the ANI of the call (col.5 ll. 46-53 service subscription related to customer line i.e. ANI),* the calling party number of the call, the current load allocation of the first of said at least two subnetworks, the current load allocation of the second of said at least two sub networks, the existence of a qualifying routing plan or routing information to send a call into said second of said at least two subnetworks, *an on/off toggle administrable from a work center (col. 5 ll. 4-9 toggling service subscription),* the type of service processor requires to handle the call ***or*** a combination thereof.

6. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over March (US Patent No. 6,327,358 B1), and further in view of Wilson.

Regarding claim 1, March teaches of a method of processing calls in an aggregate telecommunications network having at least two subnetworks, comprising the steps of:

creating a set of decision criteria (col. 6 ll. 54-64 lowest common point of access; col. 6 ll. 65-col. 7 ll. 9 gateway that is lightly loaded etc.), applied in said first (Fig. 1 item 104) of said at least two subnetworks, that determine which calls entering said first of

said at least two sub networks should receive service processing in said second (Fig. 1 item 106) of said at least two subnetworks;

for calls that are to receive service processing in said second subnetwork, guiding those calls to that subnetwork (col. 6 ll. 44-col. 7 ll. 45; redirecting calls to IP network);

invoking service processing by said second of said at least two subnetworks (col. 8 ll. 16-34) (col. 5 ll. 65-col. 12 ll. 65).

March teaches of guiding and routing calls based on the source address of the call by reverting the call to and routing it from the gateway closest to the point where call comes in, but March does not specifically teach of guiding calls and providing service based on the type of a trunk from which the call comes in.

Grouping trunks of same type in a common set as a trunk group was very well know in the art, and the trunk group of the trunk identified various parameters including trunk type associated with the trunk for common processing of calls from the multiple trunks sharing the same characteristics. (Note: the **trunk type** determination as disclosed in the instant application paragraph 0031 **is dependent upon** the attributes of the incoming switch **trunk group**. Note: The Applicant's attention is drawn to US Patent No. 3,564,149 to Charles Funk et. al. col. 23 ll. 21-25 wherein it teaches that trunk group information provides the trunk type and origination of the call, US Patent No. 6,459,788 to Khuc et. al. col. 28 ll. 7-20 wherein it teaches that trunk group identifies the trunk type, and also Newton's Telecom Dictionary by Harry Newton, 16th edition, February 2000, ISBN # 1-57820-053-9, published by Telecom Books, pg 884 describes

that trunk group is a group of essentially like trunks that go between the same geographical points, and trunk group performs the same function as a single trunk. The copy of this dictionary page is supplied with this Office Action).

However, in the same field of communication, Wilson teaches of grouping multiple trunks of the same type in a trunk group by inheriting common characteristics (col. 6 ll. 30-col. 7 ll. 44, col. 17 ll. 38-48, ll. 55-62 show multiple trunk groups with their respective individual trunks with the same type of T1-E&M), and to couple trunks in a particular trunk group to their specialized module for processing (col. 18 ll. 1-8), and also update characteristics of all trunks in a trunk group by changing parameter at the trunk group level (col. 18 ll. 10-col. 19 ll. 10 changing the trunk type for all trunks in trunk group 01 from T1-E&M to T1-E&M-Wink with single change command) (col. 2 ll. 38-43 operating parameters of trunk group are defined as trunk type configuration).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify March to group links with common characteristics as a trunk group and provide specialized processing based on trunk group defined trunk type as taught by Wilson in order to "provide mechanism which allows rapid and simple reconfiguration of a voice processing system in order to enable the system to operate with a plurality of different telephone lines and switching equipment" (Wilson, col. 2 ll. 15-18).

Regarding claim 2, March teaches of the method further comprising the step of:

providing information conveyed by signaling that accompanies the call guided from the first subnetwork to the second subnetwork that is sufficient for causing the

invocation of service processing in the second subnetwork (Fig. 3A step 314; Fig. 4A step 416 IAM with different parameters).

Regarding claim 3, March teaches of the method further comprising the step of:

providing information conveyed by signaling that accompanies the call guided from the first to second subnetwork that is sufficient for supporting service processing in the second subnetwork (Fig. 4A step 416 IAM with different parameters i.e. CLD, DPC, IPA).

Regarding claim 4, March teaches of the method wherein said information conveyed by signaling comprises:

information selected from the group of *routing number (using DPC in IAM),* original dialed number, an explicit trigger ***or*** a combination thereof (Fig. 4A step 416 IAM with DPC).

Regarding claim 5, March teaches of the method wherein said associated information conveyed by signaling is selected from the group of information available to the first subnetwork calling party number, original dialed number, *routing number (using DPC in IAM),* charge number, Originating Line Information, Customer ID, ***or*** a combination thereof (Fig. 4A step 416 IAM with DPC).

Regarding claim 6, March teaches of the method further comprising the step of:

targeting a specific element ***or*** type of element within said second subnetwork of said at least two subnetworks to invoke service processing for the call (col. 5 ll. 44-col. 6 ll. 44 redirecting calls to specific IP gateway).

Regarding claim 7, March teaches of the method where the selection of the specific element ***or*** type of element within said second subnetwork is based on the location of the origination of the call into the first said subnetwork (col. 6 ll. 54-64 selection of IP gateway corresponding to the DN in second subnetwork is based on lowest common point of access for the location of calling terminal originating the call).

Regarding claim 8, March teaches of the method wherein said decision criteria is selected from at least ***one of*** the group of:

service type, features potentially applicable within a given service type, called party number, original dialed number, *how close the ingress switch in said first subnetwork is in terms of some proximity measure to said second subnetwork (col. 6 ll. 54-64 selection of IP gateway corresponding to the DN in second subnetwork is based on lowest common point of access for the ingress switch),* the identity or type of the particular trunk group over which the call entered said first of said at least two subnetworks, the ANI of the call, the calling party number of the call, the current load allocation of the first of said at least two subnetworks, *the current load allocation of the second of said at least two sub networks (col. 6 ll. 65-col. 7 ll. 10 selection of IP gateway corresponding to the load in second subnetwork),* the existence of a qualifying routing plan or routing information to send a call into said second of said at least two subnetworks, an on/off toggle administrable from a work center, the type of service processor requires to handle the call ***or*** a combination thereof.

Regarding claim 9, March teaches of the method wherein the guidance of calls to the second subnetwork is responsive to a routing number (IAM with DPC) (Fig. 4A, step 416).

Regarding claim 10, March teaches of the method further comprising:

identifying qualified Routing Plans and using said qualified plans in said decision step wherein the provisioning system responsible for installing Routing Plans as part of service logic examines each plan to determine its eligibility for service processing in the second subnetwork (col. 6 ll. 54-col. 7 ll. 45, different routing plans used by service logic provisioned statically or dynamically).

7. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smyk, and further in view of Soncodi (US Patent Application Publication No. 2005/0074026 A1).

Regarding claim 1, Smyk teaches of a method of processing calls in an aggregate telecommunications network having at least two subnetworks, comprising the steps of:

creating a set of decision criteria, applied in a first (Fig. 4 item 402) of said at least two subnetworks, that determine which calls entering said first of said at least two sub networks should receive service processing in said second (Fig. 4 item 400) of said at least two subnetworks;

for calls that are to receive service processing in a second subnetwork, guiding those calls to that subnetwork (col. 5 ll. 12-21, 28-57; col. 6 ll. 3-47; guiding calls to PSTN);

invoking service processing by said second of said at least two subnetworks (col. 6 ll. 48-57) (col. 4 ll. 64-col. 9 ll. 50).

Smyk teaches of guiding calls and providing service based on information for a line from which call comes in (col. 5 ll. 46-61), but Smyk does not teach of providing service based on the type of a trunk from which the call comes in.

Grouping trunks of same type in a common set as a trunk group was very well know in the art, and the trunk group of the trunk identified various parameters including trunk type associated with the trunk for common processing of calls from the multiple trunks sharing the same characteristics. (Note: the **trunk type** determination as disclosed in the instant application paragraph 0031 **is dependent upon** the attributes of the incoming switch **trunk group**. Note: The Applicant's attention is drawn to US Patent No. 3,564,149 to Charles Funk et. al. col. 23 ll. 21-25 wherein it teaches that trunk group information provides the trunk type and origination of the call, US Patent No. 6,459,788 to Khuc et. al. col. 28 ll. 7-20 wherein it teaches that trunk group identifies the trunk type, and also Newton's Telecom Dictionary by Harry Newton, 16th edition, February 2000, ISBN # 1-57820-053-9, published by Telecom Books, pg 884 describes that trunk group is a group of essentially like trunks that go between the same geographical points, and trunk group performs the same function as a single trunk. The copy of this dictionary page is supplied with this Office Action).

However, in the same field of communication, Soncodi teaches of grouping incoming trunks of same type in an incoming trunk group (Paragraph 0002 trunk groups are physical facilities i.e. trunks between switching offices and Paragraphs 0003, 0019-0020, 0025 individually teach that trunk groups are identified based on the trunk type over which message is received), and guiding calls and providing service based on information for a trunk group from which call comes in (Paragraphs 0019 selectively processing calls based on incoming trunk group, 0021 selecting per-trunk-group call processor for per-trunk-group call features associated with individual trunk group, 0022, individual call treatments based on per-trunk-group data, 0030 screening or call blocking per incoming trunk group, 0033 quality of service, cost of service, priority for routing based on incoming trunk group, 0036 AIN features associated with incoming trunk group, 0037 routing and blocking calls based on incoming trunk group, 0039 routing based on particular incoming trunk group).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Smyk to group incoming trunk types in an incoming trunk group, and guiding calls and providing service based on a trunk group (and hence types of trunks in the trunk group) from which call comes in as taught by Soncodi in order to provide "methods and systems for identifying SIP trunk groups and for selectively processing calls on a per-trunk-group basis" (Soncodi, Paragraph 0005) and enabling "PSTN-like-trunk-group features to be implemented in a SIP environment" (Soncodi, Paragraph 0040).

Regarding claim 2, Smyk teaches of the method further comprising the step of:

providing information conveyed by signaling that accompanies the call guided from the first subnetwork to the second subnetwork that is sufficient for causing the invocation of service processing in the second subnetwork (col. 6 ll. 11-47 SM sending set-up message to class 5 switch; col. 6 ll. 34-47 SM causing signaling of ABCD bits for connection necessary for invocation of service).

Soncodi teaches of providing information conveyed by signaling (SIP) that accompanies the call guided from the first subnetwork to the second subnetwork that is sufficient for causing the invocation of service processing in the second subnetwork (Paragraphs 0019-0020).

Regarding claim 3, Smyk teaches of the method further comprising the step of:

providing information conveyed by signaling that accompanies the call guided from the first to second subnetwork that is sufficient for supporting service processing in the second subnetwork (col. 6 ll. 11-47 SM sending set-up message to class 5 switch and SM causing signaling of ABCD bits for connection sufficient for supporting of service; col. 6 ll. 48-57 dialed digits sufficient for service are conveyed via signaling).

Soncodi teaches of providing information conveyed by signaling that accompanies the call guided from the first to second subnetwork that is sufficient for supporting service processing in the second subnetwork (Paragraphs 0019-0020).

Regarding claim 4, Smyk teaches of the method wherein said information conveyed by signaling comprises:

information selected from the group of routing number, *original dialed number,* an explicit trigger ***or*** a combination thereof (col. 6 ll. 11-13, 48-57, information in set-up message and dialed digits i.e. original dialed number).

Soncodi teaches of information selected from the group of *routing number,* original dialed number, an explicit trigger ***or*** a combination thereof (Paragraph 0020 SIP via header information).

Regarding claim 5, Smyk teaches of the method wherein said associated information conveyed by signaling is selected from the group of information available to the first subnetwork *calling party number (col. 5 ll. 46-53 subscription of customer based on calling party number), original dialed number (col. 6 ll. 48-57 telephony or AIN services based on collected digits i.e. original dialed number),* routing number, charge number, Originating Line Information, Customer ID, ***or*** a combination thereof.

Soncodi teaches of the method wherein said associated information conveyed by signaling is selected from the group of information available to the first subnetwork calling party number, *original dialed number (Paragraph 0030 toll calls, Paragrpah 0033 911 calls, Paragraph 0036 LNP query for dialed number, Paragraph 0039 translating digits), routing number (Paragraph 0020 via header information, Paragraph 0036 inserting routing number by sending peer for the destination peer),* charge number, *Originating Line Information (source IP address),* Customer ID, ***or*** a combination thereof.

Regarding claim 6, Smyk teaches of the method further comprising the step of:

targeting a specific element ***or*** type of element within said second subnetwork of said at least two sub networks to invoke service processing for the call (col. 6 ll. 11-13 specific class 5 switch; col. 8 ll. 46-47 PSTN type of network element).

Soncodi teaches of per-trunk-group call processor for selectively processing calls based on service specified in per-trunk-group table (Paragraph 0019).

Regarding claim 7, Smyk teaches of the method where the selection of the specific element ***or*** type of element within said second subnetwork may be based on the location of the origination of the call into the first said subnetwork (col. 5 ll. 1-7 local service provider for a subscriber is based on subscriber line location originating the call).

Soncodi teaches of selecting per-trunk-group call processor for selectively processing calls based on incoming trunk group from which call (Paragraph 0019) and the identification of this trunk group is based on the location of the origination of the call (Paragraph 0022 source IP address parameter).

Regarding claim 8, Smyk teaches of the method wherein said decision criteria is selected from at least ***one of*** the group of:

service type, *features potentially applicable within a given service type (col.5 ll. 46-53 service subscription)*, called party number, original dialed number, how close the ingress switch in said first subnetwork is in terms of some proximity measure to said second subnetwork, the identity or type of the particular trunk group over which the call entered said first of said at least two subnetworks, *the ANI of the call (col.5 ll. 46-53 service subscription related to customer line i.e. ANI),* the calling party number of the

call, the current load allocation of the first of said at least two subnetworks, the current load allocation of the second of said at least two sub networks, the existence of a qualifying routing plan or routing information to send a call into said second of said at least two subnetworks, *an on/off toggle administrable from a work center (col. 5 ll. 4-9 toggling service subscription),* the type of service processor requires to handle the call ***or*** a combination thereof.

Soncodi teaches of said decision criteria selected from at least ***one of*** the group of:

service type, features potentially applicable within a given service type (Paragraph 0022), called party number, original dialed number (Paragraph 0033), how close the ingress switch in said first subnetwork is in terms of some proximity measure to said second subnetwork, *the identity or type of the particular trunk group over which the call entered said first of said at least two subnetworks (Paragraph 0019-0025),* the ANI of the call, the calling party number of the call, *the current load allocation of the first of said at least two subnetworks, the current load allocation of the second of said at least two sub networks (Paragraph 0027, 0037), the existence of a qualifying routing plan or routing information to send a call into said second of said at least two subnetworks (Paragraphs 0035, 0037), an on/off toggle administrable from a work center (Paragraph 0037 turn on/off based on time), the type of service processor requires to handle the call (Paragraph 0029)* ***or*** a combination thereof.

Regarding claim 9, Soncodi teaches of the method wherein the guidance of calls to the second subnetwork is responsive to a routing number (Paragraphs 0035-0037).

8. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over March, and further in view of Soncodi.

Regarding claim 1, March teaches of a method of processing calls in an aggregate telecommunications network having at least two subnetworks, comprising the steps of:

creating a set of decision criteria (col. 6 ll. 54-64 lowest common point of access; col. 6 ll. 65-col. 7 ll. 9 gateway that is lightly loaded etc.), applied in said first (Fig. 1 item 104) of said at least two subnetworks, that determine which calls entering said first of said at least two sub networks should receive service processing in said second (Fig. 1 item 106) of said at least two subnetworks;

for calls that are to receive service processing in said second subnetwork, guiding those calls to that subnetwork (col. 6 ll. 44-col. 7 ll. 45; redirecting calls to IP network);

invoking service processing by said second of said at least two subnetworks (col. 8 ll. 16-34) (col. 5 ll. 65-col. 12 ll. 65).

March teaches of guiding and routing calls based on the source address of the call by reverting the call to and routing it from the gateway closest to the point where call

comes in, but March does not specifically teach of guiding calls and providing service based on the type of a trunk from which the call comes in.

Grouping trunks of same type in a common set as a trunk group was very well know in the art, and the trunk group of the trunk identified various parameters including trunk type associated with the trunk for common processing of calls from the multiple trunks sharing the same characteristics. (Note: the **trunk type** determination as disclosed in the instant application paragraph 0031 **is dependent upon** the attributes of the incoming switch **trunk group**. Note: The Applicant's attention is drawn to US Patent No. 3,564,149 to Charles Funk et. al. col. 23 ll. 21-25 wherein it teaches that trunk group information provides the trunk type and origination of the call, US Patent No. 6,459,788 to Khuc et. al. col. 28 ll. 7-20 wherein it teaches that trunk group identifies the trunk type, and also Newton's Telecom Dictionary by Harry Newton, 16th edition, February 2000, ISBN # 1-57820-053-9, published by Telecom Books, pg 884 describes that trunk group is a group of essentially like trunks that go between the same geographical points, and trunk group performs the same function as a single trunk. The copy of this dictionary page is supplied with this Office Action).

However, in the same field of communication, Soncodi teaches of grouping incoming trunks of same type in an incoming trunk group (Paragraph 0002 trunk groups are physical facilities i.e. trunks between switching offices and Paragraphs 0003, 0019-0020, 0025 individually teach that trunk groups are identified based on the trunk type over which message is received), and guiding calls and providing service based on information for a trunk group from which call comes in (Paragraphs 0019 selectively

processing calls based on incoming trunk group, 0021 selecting per-trunk-group call processor for per-trunk-group call features associated with individual trunk group, 0022, individual call treatments based on per-trunk-group data, 0030 screening or call blocking per incoming trunk group, 0033 quality of service, cost of service, priority for routing based on incoming trunk group, 0036 AIN features associated with incoming trunk group, 0037 routing and blocking calls based on incoming trunk group, 0039 routing based on particular incoming trunk group).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify March to group incoming trunk types in an incoming trunk group, and guiding calls and providing service based on a trunk group (and hence types of trunks in the trunk group) from which call comes in as taught by Soncodi in order to provide "methods and systems for identifying SIP trunk groups and for selectively processing calls on a per-trunk-group basis" (Soncodi, Paragraph 0005) and enabling "PSTN-like-trunk-group features to be implemented in a SIP environment" (Soncodi, Paragraph 0040).

Regarding claim 2, March teaches of the method further comprising the step of:

providing information conveyed by signaling that accompanies the call guided from the first subnetwork to the second subnetwork that is sufficient for causing the invocation of service processing in the second subnetwork (Fig. 3A step 314; Fig. 4A step 416 IAM with different parameters).

Soncodi teaches of providing information conveyed by signaling (SIP) that accompanies the call guided from the first subnetwork to the second subnetwork that is

sufficient for causing the invocation of service processing in the second subnetwork (Paragraphs 0019-0020).

Regarding claim 3, March teaches of the method further comprising the step of:

providing information conveyed by signaling that accompanies the call guided from the first to second subnetwork that is sufficient for supporting service processing in the second subnetwork (Fig. 4A step 416 IAM with different parameters i.e. CLD, DPC, IPA).

Soncodi teaches of providing information conveyed by signaling that accompanies the call guided from the first to second subnetwork that is sufficient for supporting service processing in the second subnetwork (Paragraphs 0019-0020).

Regarding claim 4, March teaches of the method wherein said information conveyed by signaling comprises:

information selected from the group of *routing number (using DPC in IAM),* original dialed number, an explicit trigger ***or*** a combination thereof (Fig. 4A step 416 IAM with DPC).

Soncodi teaches of information selected from the group of *routing number,* original dialed number, an explicit trigger ***or*** a combination thereof (Paragraph 0020 SIP via header information).

Regarding claim 5, March teaches of the method wherein said associated information conveyed by signaling is selected from the group of information available to the first subnetwork calling party number, original dialed number, *routing number (using*

DPC in IAM), charge number, Originating Line Information, Customer ID, ***or*** a combination thereof (Fig. 4A step 416 IAM with DPC).

Soncodi teaches of the method wherein said associated information conveyed by signaling is selected from the group of information available to the first subnetwork calling party number, *original dialed number (Paragraph 0030 toll calls, Paragrpah 0033 911 calls, Paragraph 0036 LNP query for dialed number, Paragraph 0039 translating digits), routing number (Paragraph 0020 via header information, Paragraph 0036 inserting routing number by sending peer for the destination peer),* charge number, *Originating Line Information (source IP address),* Customer ID, ***or*** a combination thereof.

Regarding claim 6, March teaches of the method further comprising the step of:

targeting a specific element ***or*** type of element within said second subnetwork of said at least two subnetworks to invoke service processing for the call (col. 5 ll. 44-col. 6 ll. 44 redirecting calls to specific IP gateway).

Soncodi teaches of per-trunk-group call processor for selectively processing calls based on service specified in per-trunk-group table (Paragraph 0019).

Regarding claim 7, March teaches of the method where the selection of the specific element ***or*** type of element within said second subnetwork is based on the location of the origination of the call into the first said subnetwork (col. 6 ll. 54-64 selection of IP gateway corresponding to the DN in second subnetwork is based on lowest common point of access for the location of calling terminal originating the call).

Soncodi teaches of selecting per-trunk-group call processor for selectively processing calls based on incoming trunk group from which call (Paragraph 0019) and the identification of this trunk group is based on the location of the origination of the call (Paragraph 0022 source IP address parameter).

Regarding claim 8, March teaches of the method wherein said decision criteria is selected from at least ***one of*** the group of:

service type, features potentially applicable within a given service type, called party number, original dialed number, *how close the ingress switch in said first subnetwork is in terms of some proximity measure to said second subnetwork (col. 6 ll. 54-64 selection of IP gateway corresponding to the DN in second subnetwork is based on lowest common point of access for the ingress switch),* the identity or type of the particular trunk group over which the call entered said first of said at least two subnetworks, the ANI of the call, the calling party number of the call, the current load allocation of the first of said at least two subnetworks, *the current load allocation of the second of said at least two sub networks (col. 6 ll. 65-col. 7 ll. 10 selection of IP gateway corresponding to the load in second subnetwork),* the existence of a qualifying routing plan or routing information to send a call into said second of said at least two subnetworks, an on/off toggle administrable from a work center, the type of service processor requires to handle the call ***or*** a combination thereof.

Soncodi teaches of said decision criteria selected from at least ***one of*** the group of:

service type, features potentially applicable within a given service type (Paragraph 0022), called party number, original dialed number (Paragraph 0033), how close the ingress switch in said first subnetwork is in terms of some proximity measure to said second subnetwork, *the identity or type of the particular trunk group over which the call entered said first of said at least two subnetworks (Paragraph 0019-0025),* the ANI of the call, the calling party number of the call, *the current load allocation of the first of said at least two subnetworks, the current load allocation of the second of said at least two sub networks (Paragraph 0027, 0037), the existence of a qualifying routing plan or routing information to send a call into said second of said at least two subnetworks (Paragraphs 0035, 0037), an on/off toggle administrable from a work center (Paragraph 0037 turn on/off based on time), the type of service processor requires to handle the call (Paragraph 0029)* ***or*** a combination thereof.

Regarding claim 9, March teaches of the method wherein the guidance of calls to the second subnetwork is responsive to a routing number (IAM with DPC) (Fig. 4A, step 416).

Soncodi teaches of the method wherein the guidance of calls to the second subnetwork is responsive to a routing number (Paragraphs 0035-0037).

Regarding claim 10, March teaches of the method further comprising:

identifying qualified Routing Plans and using said qualified plans in said decision step wherein the provisioning system responsible for installing Routing Plans as part of service logic examines each plan to determine its eligibility for service processing in the

second subnetwork (col. 6 ll. 54-col. 7 ll. 45, different routing plans used by service logic provisioned statically or dynamically).

9. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smyk and Wilson as applied to claim 1 above, and further in view of Funk (US Patent No. 5,185,785).

Regarding claims 11, 12, Smyk and Wilson do not specifically teach about switched access trunk and nodal trunk.

However, in the same field of communication, Funk teaches of identifying nodal trunk (col. 7 ll. 16-21) and switched access trunk (col. 7 ll. 22-29) connecting two points in the network and providing selective recording for billing based on data in associated trunk subgroup (col. 8 ll. 7-16).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Smyk and Wilson to identify as switched access and nodal access trunks in the network as taught by Funk in order to provide "a simplified, more cost-effective recording and rating method to enable carrier networks to accurately bill customers for these nodal services, as well as accommodating non-nodal services and future service applications" (Funk col. 1 ll. 51-55).

10. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over March and Wilson as applied to claim 1 above, and further in view of Funk (US Patent No. 5,185,785).

Regarding claims 11, 12, March and Wilson do not specifically teach about switched access trunk and nodal trunk.

However, in the same field of communication, Funk teaches of identifying nodal trunk (col. 7 ll. 16-21) and switched access trunk (col. 7 ll. 22-29) connecting two points in the network and providing selective recording for billing based on data in associated trunk subgroup (col. 8 ll. 7-16).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify March and Wilson to identify as switched access and nodal access trunks in the network as taught by Funk in order to provide "a simplified, more cost-effective recording and rating method to enable carrier networks to accurately bill customers for these nodal services, as well as accommodating non-nodal services and future service applications" (Funk col. 1 ll. 51-55).

11. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smyk and Soncodi as applied to claim 1 above, and further in view of Funk (US Patent No. 5,185,785).

Regarding claims 11, 12, Smyk and Soncodi do not specifically teach about switched access trunk and nodal trunk.

However, in the same field of communication, Funk teaches of identifying nodal trunk (col. 7 ll. 16-21) and switched access trunk (col. 7 ll. 22-29) connecting two points in the network and providing selective recording for billing based on data in associated trunk subgroup (col. 8 ll. 7-16).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Smyk and Soncodi to identify as switched access and nodal access trunks in the network as taught by Funk in order to enhance per-trunk-group based billing (Soncodi, Paragraph 0038) to provide "a simplified, more cost-effective recording and rating method to enable carrier networks to accurately bill customers for these nodal services, as well as accommodating non-nodal services and future service applications" (Funk col. 1 ll. 51-55).

12. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over March and Soncodi as applied to claim 1 above, and further in view of Funk (US Patent No. 5,185,785).

Regarding claims 11, 12, March and Soncodi do not specifically teach about switched access trunk and nodal trunk.

However, in the same field of communication, Funk teaches of identifying nodal trunk (col. 7 ll. 16-21) and switched access trunk (col. 7 ll. 22-29) connecting two points in the network and providing selective recording for billing based on data in associated trunk subgroup (col. 8 ll. 7-16).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify March and Soncodi to identify as switched access and nodal access trunks in the network as taught by Funk in order to enhance per-trunk-group based billing (Soncodi, Paragraph 0038) to provide "a simplified, more cost-effective recording and rating method to enable carrier networks to accurately bill

customers for these nodal services, as well as accommodating non-nodal services and future service applications" (Funk col. 1 ll. 51-55).

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 5,559,877 Ash

US Patent No. 6,356,757 Sawyer

US Patent Application Publication No. 2003/0026412 Ibezim

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEMANT PATEL whose telephone number is (571)272-8620. The examiner can normally be reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hemant Patel
Examiner
Art Unit 2614

/H. P./
Examiner, Art Unit 2614